Patent Claims

1. Device for producing individual droplets from liquids having a different viscosity with a nozzle, characterized in that the material from which droplets are to be produced is pressed by compressed air from at least one container through at least one capillary in the interior of a nozzle and the droplet separation or ejection can be accomplished both by means of an air flow passed concentrically to the capillary in the nozzle and by means of jets of compressed air resulting in an interruption of the liquid flow in the liquid-carrying capillary itself.

2. Device according to claim 1, operating according to a method according to claim 1, characterized in that it comprises one or more of the following main components:
   - nozzle
   - reservoir for the material from which droplets are to be produced
   - automatic control system for supplying the reservoir with compressed air
   - control elements for controlling the concentric air flow which causes the separation of the droplet in the nozzle
   - control device and control valve for the jets of compressed air generating the interruptions in the liquid column inside the capillary.

3. Device according to claims 1 to 2, characterized in that it operates in accordance with Fig. 2a and/or its components are arranged and/or connected to each other in accordance with Fig. 2a.

4. Device according to claims 1 to 3, characterized in that it operates in accordance with Fig. 2b and/or its components are arranged and/or connected to each other in accordance with Fig. 2b

5. Device according to claims 1 to 4, characterized in that liquid droplets can be produced therewith in a gaseous medium by means of a nozzle.

6. Device according to claims 1 to 5, characterized in that liquid droplets can be produced therewith in liquid media by means of a nozzle.

7. Device according to claims 1 to 6, characterized in that it comprises a nozzle which operates in accordance with Fig. 1 and/or the components of which are set up, arranged and/or connected to each other in accordance with Fig. 1.

8. Device according to claims 1 to 7, characterized in that the produced droplets can be precipitated chemically, e.g. by the influence of salts.

9. Device according to claims 1 to 8, characterized in that the produced droplets can be precipitated physically, e.g. by a temperature change.

10. Device according to claims 1 to 9, characterized in that the precipitated droplets contain the material to be immobilized.